TRAWL HAUL LOG

This log contains detailed questions about the setting, hauling and fishing time of the gear, as well as the haul's catch. Complete a new log after each hauling of gear. If you feel that you cannot go on deck for weather related safety reasons, record as much information on this log as possible (*i.e.* Header Information, weather, depths, times, positions, *etc.*).

If the gear is set, and only partially hauled back, include the time spent hauling and resetting the net in this haul's time. Record END TIME (#4) when the hauling equipment is put into gear.

The species summary section of this log should be used to record catches of all species (some exceptions listed below), debris and shells. Species caught that should not be recorded on this particular log include: pelagic species (*i.e.* swordfish, billfish, tuna, bonito, sharks, *etc.*), sturgeons, rays or tagged fish. Those species must be recorded on an Individual Animal Log. All marine mammals, sea turtles, and sea birds caught in the gear must be recorded on a Marine Mammal, Sea Turtle, and Sea Bird Incidental Take Log. See Appendix R. Species List and Corresponding Logs for a list of species and the log(s) on which to record them.

If there are insufficient lines on one form for all species caught in this haul, continue listing species on an additional Trawl Haul Log making sure to complete all of the Header Information (A-C), GEAR CODE (D), GEAR NUMBER (1) and HAUL NUMBER (E).

If information is unavailable or unknown to any question except a "No/Yes" question, record a dash (-) in the field. If the answer to a "No/Yes" question is unknown, record a "9" on the line next to the code for "No" to indicate that a field was not skipped, but the answer is unknown. If a field relates to a question to which you previously answered "No", leave the field blank.

Become familiar with the following definitions.

DEFINITIONS

OTTER TRAWL

Haul Begin: First component of net deployed, *i.e.* net hits the water.
Haul End: Hauling equipment put into gear.

INSTRUCTIONS

For instructions on completing fields **A-W**, refer to the Common Haul Log Data section of the NEFSC Observer Program Manual.

1. GEAR NUMBER: Record the gear number used for this haul as uniquely identified on the appropriate Trawl Gear Characteristics Log(s).

2. GEAR CONDITION: Indicate the condition of the gear at haulback, even if this was the condition of the gear when set, by recording the most appropriate two digit code listed below, and in Appendix J. Gear Condition Codes:

000 =	Unknown.
010 =	No gear damage, or very few small, scattered holes.
020 =	Wings twisted or torn, not exceeding 50% of meshes.
030 =	Wings twisted or torn, exceeding 50% of meshes.
040 =	Square and/or bosom torn, not exceeding 50% of meshes.
050 =	Square and/or bosom torn, exceeding 50% of meshes.
060 =	Belly torn, not exceeding 25% of meshes.
070 =	Belly torn, exceeding 25% of meshes.
080 =	Codend and/or extension piece torn, not exceeding 10% of meshes.
090 =	Codend and/or extension piece torn, exceeding 10% of meshes.
100 =	Hang-up, causing gear to be hauled back before scheduled time; minor damage.
110 =	Parted legs, sweep, or headrope.
120 =	Tear up exceeding gear condition of code 02, but not total net destruction.
130 =	Obstruction in the gear, such as a large amount of fixed gear, boulders, *etc.*
140 =	Crossed doors.
150 =	Open codend.
160 =	Major hang-up, tear-up, or loss of gear.
170 =	Grate clogged with fish or debris.
990 =	Other, specify in COMMENTS.

3. BEGIN/END HAUL DATE: Record the month, day, and year, based on local time, that this haul began and ended.

4. BEGIN/END HAUL TIME: Record the local time, using the 24 hour clock (0000-2359), that this haul began and ended, *i.e.* when the first component of the net is deployed, or the net hits the water (Haul Begin) and when the hauling equipment is put into gear (Haul End).

5. NUMBER OF TURNS: Record the number of significant turns the vessel makes during this haul *i.e.,* greater than 90 degrees. This information may be obtained from the Captain.

> **NOTE:** This field should be filled out for both observed and unobserved hauls.
> **NOTE:** If no turns are made during this haul, record a zero.
> **NOTE:** If the number of turns is unknown, record a dash.

6. TOW SPEED: Record, to the nearest tenth of a knot, the average towing speed, over the bottom, for this haul.

7. WIRE OUT: Record, in whole fathoms, the amount of wire paid out for this haul. This measurement is taken from the towing blocks to the trawl doors. This information may be obtained from the captain.

8. HAUL END WATER TEMPERATURE: Record, to the nearest tenth of a degree Fahrenheit, the surface water temperature when this haul **ended,** *i.e* when the hauling equipment is put into gear.

> **NOTE:** If this temperatures is obtained in Celsius, use <u>Appendix Q. Conversion Tables</u> to convert it to Fahrenheit.
> **NOTE:** Use a "ScoopMaster" thermometer to obtain this temperature.
> **NOTE:** If an incidental take occurs in this haul, a HAUL END WATER TEMPERATURE **must** be recorded.

9. DATE/TIME FISHING BEGINS: Record the local date (month, day, and year) and time, using the 24 hour clock (0000-2359), that the gear is fully deployed and actively fishing (this may be when the brakes are put on).

10. DATE/TIME GEAR ONBOARD: Record the local date (month, day, and year) and time, using the 24 hour clock (0000-2359), that the gear from this haul is completely out of the water.

FISH PUMPING

NOTE: The following 5 fields, BEGIN/END DATE (#11), BEGIN/END TIME (#12), CAPTAIN'S CATCH ESTIMATE (#13), CODEND (#14), FISH PRESENT (#15), and LOCATION OF CODEND (#16), should only be filled out if the fish are pumped from the codend.

11. BEGIN/END DATE: Record the month, day, and year, based on local time, that the fish pumping began and ended.

12. BEGIN/END TIME: Record the local time, using the 24 hour clock (0000-2359), that the fish pumping began and ended, *i.e.,* when the fish pump is attached to codend and is initially turned on (fish pump begin) and when the fish pump is turned off and fish are no longer coming out of the dewatering box (fish pump end).

13. CAPTAIN'S CATCH ESTIMATE: Record, in whole pounds, the Captain's catch estimate of the total catch prior to pumping the catch onboard. This value will aid in determining the time increments when obtaining a subsample.

14. CODEND?: Record whether the codend was visible at the completion of the pumping process by placing an "X" next to the appropriate code:

> 0 = No.
> 1 = Yes.

15. FISH PRESENT?: Record whether there were fish present in the net at the completion of the pumping process by placing an "X" next to the appropriate code:

> 0 = No.
> 1 = Yes.
> 2 = Could Not See.

16. LOCATION OF CODEND: Record the location of the net when the remainder of the catch was emptied at the completion of the pumping process by placing an "X" next to the appropriate code:

1   =   Off Stern.
2   =   Side of Vessel.
3   =   On Deck.

OPENING OF NET

NOTE: The following 3 fields, VERTICAL OPENING (#17), HORIZONTAL OPENING (#18), and DOOR SPREAD (#19), should only be filled out if Gear Mounted Electronics are used.

17. VERTICAL OPENING: Record, in whole feet, the average distance from the top of the mouth to the bottom of the mouth while the net is fishing. This information may be obtained from the Captain.

18. HORIZONTAL OPENING: Record, in whole feet, the average width of the mouth of the net, from wing tip to wing tip, when the doors are open while the net is fishing. This information may be obtained from the Captain.

19. DOOR SPREAD: Record, in whole feet, the average distance from the door on one side of the net to the door on the other side of the net while the net is fishing. This information may be obtained from the Captain.

COMMENTS

Record any additional information regarding this haul, *i.e.* unusual species caught, uncommon catches, tear-ups, reason to expect the gear was not fishing properly, *etc.* If turns were made during the haul, note whether the doors were left in the water (both, starboard, or port). If more room is needed, use the back of this log, making sure to write "See Back" on the front of the log. Reference each comment with its corresponding field name.